



**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>0509</b>	<b>FOR FURTHER ACTION</b>		See Form PCT/PEA/416
International application No. <b>PCT/IN2005/000034</b>	International filing date (day/month/year) <b>28.01.2005</b>	Priority date (day/month/year) <b>28.01.2004</b>	
International Patent Classification (IPC) or national classification and IPC <b>G01N30/86, G01N30/88</b>			
Applicant <b>COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH et a</b>			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand  <b>26.08.2005</b>		Date of completion of this report  <b>20.12.2005</b>	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80288 Munich Tel. +49 89 2399 - 0 Tx: 523656 eprmu d Fax: +49 89 2399 - 4465		Authorized Officer  <b>Müller, T</b>  Telephone No +49 89 2399- 	

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APPROPRIATE 28 JUL 2006

**Box No. I Basis of the report**

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements\* of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-208 as originally filed

**Claims, Numbers**

1-85 as originally filed

**Drawings, Sheets**

1/183-183/183 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

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1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:
- ☐ the entire international application,
  - ☒ claims Nos. 2-51,53-84  
because:
    - ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):
    - ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 2-51,53-84 are so unclear that no meaningful opinion could be formed (*specify*):  
**see separate sheet**
    - ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
    - ☐ no international search report has been established for the said claims Nos.
    - ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
      - the written form ☐ has not been furnished
      - ☐ does not comply with the standard
      - the computer readable form ☐ has not been furnished
      - ☐ does not comply with the standard
    - ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.
    - ☐ See separate sheet for further details

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1,52
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1,52
Industrial applicability (IA)	Yes: Claims	1,52
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

Reference is made to the following documents:

- D1: WO 02/46739 A (COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH; DADALA, VIJAYA, KUMAR;) 13 June 2002 (2002-06-13)
- D2: MOLNAR I: "Computerized design of separation strategies by reversed-phase liquid chromatography: development of DryLab software" JOURNAL OF CHROMATOGRAPHY A, ELSEVIER, AMSTERDAM, NL, vol. 965, no. 1-2, 2 August 2002 (2002-08-02), pages 175-194, XP004373703 ISSN: 0021-9673
- D3: KARJALAINEN E J ET AL: "Spectrum extraction from hyphenated data (CD-ROM) - MATLAB programs and sample data" JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY, ELSEVIER SCIENCE INC., NEW YORK, NY, US, vol. 9, no. 8, August 1998 (1998-08), page A10, XP004274733 ISSN: 1044-0305

**Re Item III**

**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

Independent claims 1 and 52 of the present application do not meet the requirements of Article 6 PCT, because the wording of that claims is unclear, see Item VIII of the present opinion. The combination of these unclear claims with the large number of 82 dependent claims, which are referring back to unclear claims, furthermore in conjunction with a description of the application that states at least 140 problems underlying the invention on pages 20-40, lead to an extremely large number of possible methods and devices. In fact, the claims contain so many unclear options, variables, possible permutations and provisions that a lack of clarity (and conciseness) within the meaning of Article 6 PCT arises to such an extent as to render a meaningful opinion on the claims impossible. Consequently, the written opinion has been carried out for independent claims 1 and 52.

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Insofar the application can be understood at present (see Items III and VIII), it seems to be related to the analysis of chromatographic fingerprints of botanical drugs.

A similar method was disclosed in D1, cited by the applicant. The main difference between the prior art according to D1 and the present application appears to be an animated representation of the chromatographic fingerprint.

The underlying problem could therefore be regarded as alternative representation of a large amount of chromatographic data.

The proposed solution cannot be regarded as inventive in view of D2 or D3 which disclose the representation of chromatographic elution peaks as animated film.

As a consequence the subject-matter of claims 1 and 52 would not meet the requirements of inventive step (Article 33(3) PCT).

**Re Item VIII**

**Certain observations on the international application**

The subject-matter of present claim 1 is not clear because its wording is vague and unclear.

The wording "constituents ... possessing chemical and medicinal values" is not clear in that the term chemical value has not a well defined meaning in the field of analytical chemistry.

The wording "movable from 0-360 degrees in any axis" is not clear in that it is not clear what is moved and in which direction.

Method step b. is not clear in that it relates to a desired result of predicting properties of an analyte sample without indication of the method steps which are necessary to achieve this

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(SEPARATE SHEET)**

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result.

The subject-matter of present claim 52 is not clear in that it refers to claim 1 which is not clear.

Furthermore the wording polarity and conjugative properties has not a well defined meaning in the field.

The terms in brackets in the claim lead to lack of clarity, because it is not clear whether the features are limiting or not.